

# EXHIBIT A

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>Thursday, April 28, 2005
>DNA92234 [Full]
>887 sites [All Sites]
> [DNA92234], sheldens
> Lib309
>Sequence confirmed by phredphrap

          thalI          nlaIII  snaBI
          sphI  fndIII/mvni      mnlI
          nspHI bstUI talI      taqI
          taiI nspI bsh1236I      xhoI
          maeII/hpyCH4IV bslWI/spII  tsp509I[M.ecoRI-]
          aluI  hlnII/acyI cac8I  bsaAI  ecoRI  tliI
          tsp45I  sapi  ahaII/bsaBI  mlulI  rsaI  hpy188I  smII
          maeIII  mboII  aatII  cac8I  aflIII  maeII/hpyCH4IV  pae7I  hpy188I  aciI  bpmI/g
          hphI  sfoI  earI/ksp632I  hpy99I  hpyCH4V  csp6I  aluI  apoI  auaI[M.taqI-]  mnlI  fnu4HI/bsaFI  hpy18
1 TAGGTGACAC TATAGAGAG CTATGACGTC GCATGCRGCG GTACGTAAGC TCGGAATTCG GCTCGAGGAA TGAATACCTC CGAAGCCGCT TTGTTCTCCA
  ATCCACTGTG ATATCTTCTC GATACGCGAG CGTACGTGCG CATGCATTCG AGCCTTAAGC CGAGCTCCTT ACTTATGGAG GCTTCGGCGA AACAAAGAGGT
                                     ^insert starts here
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GSeqEdit, DNA92234 [Full], page 1

sorFI[M.hpaII-]  
 nclI  
 mspI  
 hpaII  
 dsav  
 bpuAI bsaKI bsp1286  
 bbsI bslI bsmFI talI bmyI  
 mnlI mboII bsaJI maeII/hpyCH4IV  
 aluI  
 101 GATGTGATA GCTCCACTAT ACCAGCCTCG TCTTCCTTCC GGGGACACAC GTGGCTCAGG GCACAGAGAG ATATTTAATG TCACCCCTCTT GGGGCTTTCA  
 CTACACTTAT CGAGGTGATA TGCTCGGAGC AGAAGGAGG CCCCCTGTTG CACCCAGTCC CGTCTCTCTC TATAAATTAC AGTGGGAGAA CCCCCGAAGT

sau3AI  
 mboI/ndeII(dam-)  
 dpnII(dam-)  
 dpnI(dam+)  
 alwI(dam-)  
 nlaIV  
 bstVI/xhoII hgaI  
 bamHI bslI tseI  
 maeI hpy188I bstXI hpy188III fnu4HI/bso  
 bfaI eco57I bpmI/gsuI(dcm-) bslI avaI bbyI bsmFI  
 mnlI  
 rmaI  
 201 TGGGACTCCC TCTGCCACAT TTTTGGAGG TTGGGAAAGT TGCTAGAGGC TTCAGAACTC CAGCCTAATG GATCCCAAC TCGGAGAAAT GGCCTGCTCC  
 ACCCTGAGGG AGACGGTGTA AAAAACCTCC AACCTTTCA ACGATCTCCG AAGTCTTGAG GTGGGATTAC CTAGGGTTTG AGCCCTCTTA CGGACGCGAGG  
 1  
 M D P K L G R M A A S  
 ^MET

fnu4HI/bsoFI  
tseI aoiI  
tseI mwoI thal nlaIII haeII  
mwoI fnu4HI/bsoFI nspHI mspi  
fnu4HI/bsoFI fnuDII/mvni scrFI[M.hpaII-]  
bbvI bbvI bstUI[M.hhaI-] nciI  
tseI tseI bsh1236I dsav hinPI bpuAI ms  
mwoI fnu4HI/bsoFI hinPI hphI mwoI hpaII bbeI rsaI mnlI  
fnu4HI/bsoFI hhaI/cfoI mnlI acil bskI xnuI mboII csp6I econI  
cac8I bbvI bbvI bpmI/gsuI[dcn-] bseRI mnlI bslI bsaJI nhal/cfoI asp700 bseI bslI  
301 CTGCTGGCTG TGCTGCTGCT GCTGCTGGAG CGCGGCATG TCTCTCACC CTCCCGCCC CCGCGCTGT TAGAGAAAGT CTTCAGTAC ATTGACCTCC  
GACGRCCGAC ACGACGACGA CGACGACCTC CGCGCGTACA AGAGGAGTGG GAGGGGCGG GCGCGGACA ATCTCTTCA GAAGTCAAG TAACTGGAGG  
12 L L A V L L L L L E R G M F S S P S P P A L L E K V F Q Y I D L H  
mboII  
earI/ksp632I  
sapi  
alul  
sstI  
sacI  
tth111I/aspI  
pleI  
haeIII/palI pfIFI  
msci/balI mlyI  
eaeI taqI hinFI  
cfzI hpy188III  
bseI hpyCH4V hpy188III  
bsgI hgaI eco57I  
401 ATCAGGATGA ATTTGTGCAG ACGCTGAAGG AGTGGGTGGC CATCGAGAGC GACTCTGTCC AGCCTGTGCC TCGCTTCAGA CAAGAGCTCT TCAGAAATGAT  
TAGTCTTACT TAACACGTC TCGGACTTCC TCACCCACCG GTAGCTCTCG CTGAGACAGG TCGGACACGG AGCGAAGTCT GTTCTCGAGA AGTCTTACTA  
46 Q D E F V Q T L K E W V A I E S D S V Q P V P R F R Q E L F R M M

GSeqEdit, DNA92234 [Full], page 3

```
mwol
scrFI[dcM-]
pspGI sau96I[M.haeIII-]
mvaI pspOMI/bsp120I
ecORI[dcM-]
dsaV[dcM-]
bstNI nlaIV
bsaKI[dcM-]
hinPI bsp1286[M.haeIII-]
hhaI/cfoI sfiI
tseI bsaJI bmyI
fnu4HI/bsaFI sau96I[M.haeIII-]
bbvI apyI[dcM+]
dsaI tseI hpyCH4V banII[M.haeIII-]
btgI/batDSI sfcI haeII apaI mnlI
bsaJI acII tseI alwNI[dcM-] haeIII/paII bsaJI
mwol fnu4HI/bsaFI pstI(M.HI-) nlaIV haeIII/paII
bceAI bbvI fnu4HI/bsaFI ecoO109I/draII nlaIII mnlI bbvI
haeIII/paII bbvI alw26I/bsaFI bglI[M.haeIII-] pshAI avaII alw26I/bsaFI mnlI
501 GCGCGTGGCT GCGGACACGC TGCAGCGCCCT GGGGGCCCGT GTGGCCCTCGG TGGACATGGG TCCTCAGCAG CTGCCCCGATG GTCAGAGTCT TCCAAATACCT
CCGGCACCGA CGCTGTGCG ACCTCGCGGA CCCCCGGCA CACCGAGCC ACCTGTACCC AGGAGTCGTC GACGGGCTAC CAGTCTCAGA AGTTTATGGA
79. A V A A D T L Q R L G A R V A S V D M G P Q Q L P D G Q S L P I P
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GSeqEdit, DNA92234 [Full], page 4

GSeqEd1t, DNA92234 [Full], page 5

```
scrFI(dcm-)      mnlI
pspGI             bpmI/gsuI(dcm-)
mvaI              sau3AI
ecoRI(dcm-)       dsav(dcm-) mboI/ndeII(dam-)
                  bstNI      dpnII(dam-)
                  bsp1286     bstYI/xhoII
                  bmyI basKI(dcm-) mboII
                  hpy188I apyI(dcm+) dnmI(dam+)
                  eco57I  bsaJI  bglII
                  mwqI  banII bpmI/gsuI(dcm-)
801 CGCCTTCAGA GCCCTGGAGC AAGATCTTCC TGTGAATATC AAATTCATCA TTGAGGGGAT GGAAGAGGCT GGCTCTGTTG CCCTGGAGGA ACTTGTGGA
    GCGGAATCT CCGGACCTCG TTCTAGAGG ACACCTTATAG TTAAAGTAGT AACTCCCCA CCTTCTCCGA CCGAGACAAC GGGACCTCCT TGAACACCTT
179 A F R A L E Q D L P V N I K F I I E G M E E A G S V A L E E L V E
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GSagEdit, DNA92234 [Full], page 6

sorFI(
 nclI
 mspI
 hpaiI
 dsav
 bssKI
 bsaJI
 xmaI/ps
 smaI
 scrFI(M
 nclI
 dsav
 bssKI
 bsaJI
 aval(M.
 nlaIV
 saI3AI
 mboI/ndeII(dam-)
 dpnII(dam-)
 dpnI(dam+)
 alwI(dam-)
 cac8I
 hpy188I
 tsp509I
 hpy188I
 tsp509I
 901 AAAGAAAGG ACCGATTCCTT CTCTGGTGTG GACTACATTC TAATTCAGA TAACCTGTGG ATCAGCCAAA GGAAGCCAGC AATCACTTAT GGAACCCGGG
 TTTCTTTTCC TGGCTAAGAA GAGACCACAC CTGATGTAAAC ATTAAGTCT ATTTGACACC TAGTCGGTTC CCITCGGTTC TTAGTGATA CCITGGGCCC
 212 K B K D R F F S G V D Y I V I S D N L W I S Q R K P A I T Y G T R G



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scrfI[dcn~]
pfpGI
mvaI
ecorII[dcn~]
dsav[dcn~]
batNI
bssKI[dcn~]
bsmAI
bsaI
hphI
nlaIII
mnlI
alul
nlaIII
mlaI
hpyCH4V
hpyI[dcn+]
bspCNI
ddel
nlaIV
hpy188III
fokI
rcaI
bstF5I
hpy188III
sfanI
bspHI
nlaIII
sau3AI
sap
mbol/ndelII[da
dnlII[dam~]
dplI[dam+] ea
1001 GGRACAGCTA CTTGATGGTG GAGGTGAAAT GCAGAGACCA GGATTTTCAC TCAGGAACCT TTGGTGGCAT CCTTCATGAA CCAATGGCTG ATCTGGTTGC
CCTTGTGGAT GAAGTACCAC CTCACATTA CGTCTCTGGF CCTAAAGTG AGTCCCTTGA AACCCCGTA GGAAGTACTT GGTACCGAC TAGACCAACG
246 N S Y F M V E V K C R D Q D F H S G T F G G I L H E P M A D L V A
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GseqEdit, DNA92234 [Full], page 8

```
scrFI[dcm-]
pspGI
nvaI
ecorII[dcm-]
dsav[dcm-]
bstNI
bssKI[dcm-]
sau96I[dcm-]
nlaIV
avaII[dcm-]
scrFI[dcm-]
pspGI apyI[dcm+]
nvaI bsmFI
ecorII[dcm-]
dsav[dcm-]
bstNI bsaJI
bssKI[dcm-] tflI
apyI[dcm+] hinfI
mboII
1101 TCTTCTCGGT AGCCPGGTAG ACTCGTCTGG TCATATCTTG GTCCCTGGAA TCTATGATGA AGTGGTTCCT CTTACAGGAG AGGAANTAAA TACATACAAA
AGAGAGGCCA TCGGACCAFC TGAGCAGACC AGTATAGGAC CAGGACCTT AGATACTACT TCACCAAGGA GAATGCTTC TCCTTTATTT ATGTAIGTTT
279 L L G S L V D S S G H I L V P G I Y D E V V P L T E E E I N F Y K
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GSeqEdit, DNA92234 [Full], page 9

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rsai
csp6I
nlaIV
kpnI
banI
asp7I8
bpmI/gsuI(dcm)
hpy188III
acc65I
mnlI
hpyCH4V
mnlI
1201 GCCATCCATC TAGACCTAGA AGRATACCGG AATAGCAGC GGGTTGAGAA ATTTCGTTC GATACATAGG AGGAGATTCT RTTGCACCTC TGGAGGTACC
CGGTAGGTAG ATCTGGATCT TCTTATGGCC TTATCGTCGG CCCAACTCTT TAAGACACAAG CTATGATTCC TCCCTCTAGA TTACGTGGAG ACCTCCATGG
312 A I H L D L E B Y R N S S R V E K F L F D T K E E I L M H L W R Y P

scrFI[M.hpaII-]
nclI
mspI
hpaII
dsav
bssKI
tseI
mspI
fnu4HI/bsoFI
tsp509I
apoI
taqI
ddeI
bseRI
hinFI
hpyCH4V
mnlI
1301 CATCTCTTTC TATTCATGGG ATCGAGGGCG CGTTTGATGA GCTTGGAAT AAAACAGTCA TACCTGGCGG AGTATAGGA AAATTTCRA TCCGTCTAGT
GTAGAGAAAG ATAGTACCC TAGCTCCCGC GCAAACTACT CGGACCTTGA TTTTGTCAAT ATGGACCGGC TCARTATCCT TTTRAAAGTT AGGCAGATCA
346 S L S I H G I E G A F D E P G T X T V I P G R V I G K F S I R L V

haeIII/palI
eaeI(dcm-)
cfrI
scrFI(dcm-)
pspGI
mvaI
ecoRII(dcm-)
dsav(dcm-)
bstNI
bssXI(dcm-)
apyI(dcm+)
xmnI
asp700
bfaI
tsp509I
apoI
xmnI
asp700
bfaI
1301 CATCTCTTTC TATTCATGGG ATCGAGGGCG CGTTTGATGA GCTTGGAAT AAAACAGTCA TACCTGGCGG AGTATAGGA AAATTTCRA TCCGTCTAGT
GTAGAGAAAG ATAGTACCC TAGCTCCCGC GCAAACTACT CGGACCTTGA TTTTGTCAAT ATGGACCGGC TCARTATCCT TTTRAAAGTT AGGCAGATCA
346 S L S I H G I E G A F D E P G T X T V I P G R V I G K F S I R L V
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GSeqEdit, DNA92234 (Full), page 10

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nlaiII      tsp45I      mboII      hpi      nlaiII      pl
msII      maeIIII      hphI      hpy188III      asp700      bstXI      ml
moli moli      aciI      hpy188III      xnnI      hI
1401 CCTCACAATG AATGTGTCTG CGGTGGAAA ACAGGTGACA CGACATCTTG AAGATGTGTT CTCCAAAAGA AATAGTTCCA ACAAGATGGT TGTITCCATG
GGGAGTGTAC TTACACAGAC GCCACCTTTT TGTCCACTGT GCTGTAGAC TTCTACACAA GAGGTTTCT TTATCAAGGT TGTCTCTACCA ACAAGGTAC
379 P H M N V S A V B K Q V T R H L E D V F S K R N S S N K M V V S M

tspRI
hpy188I      sau
sau3AI      bst4CI/hpyCH4III      mbo
tseI      mboI/ndeII[dam-]      dpn
fnu4HI/bsoFI      dpnII[dam-]      dpn
bsrI      bsvI      dpnI[dam+]      alw
1501 ACTCTAGGAC TACACCCGTG GATTGCAAT ATTGATGACA CCCAGTATCT CGCAGCAADA AGAGCGATCA GRACAGTGT TGERACAGAA CCAGATATGA
TGAGATCCTG ATGTGGGCAC CTAACGTTTA TAACACTGT GGGTCATAGA GCGTCGTTT TCTCGCTAGT CTGTCTACAA ACCTTGTCTT GGTCTATACT
412 T L G L H P W I A N I D D T Q Y L A A K R A I R T V F G T E P D M I
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GSeqEdit, DNA92234 [Full], page 11

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sau3AI
mbol/ndeII(dam-)
dpmII(dam-)
fokI dpmI(dam+)
bstF5I
scrFI(M.hpaII-)
ncII alwI(dam-)
mspi nlaIV
hpaII bstYI/xhoII
dsav bamHI
bssKI alwI(dam-) muni/mfeI
tsp509I
1601 TCCGGGATGG ATCCACCATT CCAATTGCCA AATGTTCCA GGAGATCGTC CACAAGCGC TGGTCTAAT TCCGCTGGG GCTGTTGATG ATGGAGAACA
AGGCCCTACC TAGGTGGTAA GGTAAACGGT TTTACAAGGT CCTCTAGCAG GTGTTCTCGC ACCACGATTA AGCGACCCCT CGACRACCTAC TACCTCTTGT
446 R D G S T I P I A K M F Q E I V H K S V V L I P L G A V D D G B E

sau3AI
serFI(dcm-)
pspGI mbol/ndeII(dam-)
nvaI dpmII(dam-)
ecorII(dcm-)
dsaV(dcm-)
bstNI dpmI(dam+)
bssKI(dcm-)
tsp509I
mnoI acII aluI
apyI(dcm+)
nlaIV
nliI tsp509I bbvI ddeI
sau96I(M.haeIII-)
'haeIII/palI aseI/asnI/vspI
1701 TTCCGAGAAT GAGAAATCA ACAGGTGGAA CTACATAGAG GGATCCAAAT TATTGCTGC CTTTCTCTTA GAGATGGCCC AGCTCCATTA ATCACAAGAA
AAGCGTCTTA CTCCTTTTAGT TGTCCACCTT GATGTATCTC CCTTGGTTTA ATACAGCAGG GAAAAAGAAAT CTCTACCGGG TCGAGGTAAT TAGTGTCTT
479 S Q N E K I N R W N Y I E G T K L F A A F F L E M A Q L H O

tru9I
tseI
aluI mseI

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GSeqEdit, DNA92234 [Full], page 12

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sau3AI
mboI/ndeII[dam-]
dpmII[dam-]
dpmI[dam+]
hpy188I
sau3AI tspRI
hpy188I alwI[dam-]
rmaI mboI/ndeII[dam-] hphI mnlI foki bfaI foki
maeI dpmII[dam-] tflI mnlI foki bfaI foki
bfaI dpmI[dam+] hinfI[M.hphI-] batF9I batF5I
1801 CCTTCTAGTC TGATCTGATC CACTGACAGA TTCACCTCCC CCACATCCCT AGACAGGGAT GGAATGTAAA TATCCAGAGA ATTTGGGTCT AGTATAGTAC
GGAAGATCAG ACTAGACTAG GTGACTGTCT AAGTGGAGGG GGTGTAGGGA TCTGTCCCTA CCTTACATTT ATAGGTCTCT TAAACCCAGA TCATATCATG

sau96I
nlaIV
avaII hpyCH4V
ppuMI bsgI
ecoO109I/draII
tru9I tspRI
mseI bamFI btsI
ahaIII/draI ecorV alwI[dam-] sspI
1901 ATTTTCCCTT CCATTAAAA TGCTTTGGGA TATCTGGATC AGTAATAAAA TATTCAAG GGCACATGT TGAATGGT TTAAGGTCCT CCACGACACA
TAAAGGGA GGTAAATTT ACAGAACCT ATAGACCTAG TCATTATTT ATAAAGTTT CGTGTCTACA ACCATTACCA AATCCAGGG GGTGACGTGT
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GSeqEdit, DNA92234 [Full], page 13

```
scrFI(dcm-)
pspGI
mvaI
ecorII(dcm-)
dsaV(dcm-)
bstNI
bssKI(dcm-)
apyI(dcm+)
bsII tfiI
hpyCH4V bsaJI hinfI
2001 CCTTCCTCAA GTCATAGCTG CTTCAGCAAA CTTCAGTCTC CCAGTCTC TGCAATAGCC CCAGGATGG ATTCCTTCCA ACCTTTTAGC ATATCTCCAA
GGAAGGAGTT CAGTATCGAC GAACGTCTGTT GAACTAAGG GGTTCAGGAC ACGTATCGG GGTCTTAACC TAAGGAGGT TGGAAATCG TATAGAGGTT
tseI
cac8I
tseI fnu4HI/bsOFI
fnu4HI/bsOFI
smLI bbvI bbvI
mnlI aluI hpyCH4V
2101 CCTTCCTCAA GTCATAGCTG CTTCAGCAAA CTTCAGTCTC CCAGTCTC TGCAATAGCC CCAGGATGG ATTCCTTCCA ACCTTTTAGC ATATCTCCAA
GGAAGGAGTT CAGTATCGAC GAACGTCTGTT GAACTAAGG GGTTCAGGAC ACGTATCGG GGTCTTAACC TAAGGAGGT TGGAAATCG TATAGAGGTT
sau96I tsp45I
avaII bssSI
ppuMI hqIAI/aspHI
eco0109I/draII hpy188III
mspI rmaI bsp1286
tsp509I maeI smLI bsiHKAJ foki
hpyCH4V bfaI mnlI bmyI maeIII bstFI dpmI(dam+) dpmI(dam-)
2101 CCTTCCTCAA GTCATAGCTG CTTCAGCAAA CTTCAGTCTC CCAGTCTC TGCAATAGCC CCAGGATGG ATTCCTTCCA ACCTTTTAGC ATATCTCCAA
GGAAGGAGTT CAGTATCGAC GAACGTCTGTT GAACTAAGG GGTTCAGGAC ACGTATCGG GGTCTTAACC TAAGGAGGT TGGAAATCG TATAGAGGTT
tru9I
mseI bsmAI
aseI/asnI/vspI bsaI tapRI
2201 ACTCTTTTCT TTTATCTTAT TAATAAAAT GTTGGTCTCC ACCACTGCTC CCACAAAAA AAAAAAAA AAAAAAAA AAAAAAAA
TGAGAAAGGA AATAGAATA ATTATTTTTA CAACAGAGG TGGTGACNGA GGGTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT
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GSeqEdit, DNA92234 [Full], page 14

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scrFI[M.hpaII-]
ncII
mspI
hpaII
dsav
bssKI      sau96I rsaI
xmaI/pspAI  rxiI/cspI
smaI      mroI   nlaIV
scrFI[M.hpaII-] cpoI  kpnI  hpyCH4V
acII
fnu4HI/bsoFI      taqI ncII      hpy188III csp6I
haeIII/palI      sstI  salI  dsav      bspXII  bani  sfcI
mcrI      sacI  hincII/hindII[M.taqI-]  avaII[M.hpaII-]
eagI/xmaIII/eclXI  aluI  accI[M.taqI-]  tru9I mspI  asp718
eaeI      hgiAI/aspHI[M.aluI-]  mseI  bspEI  cfrI0I/bsrFI
cfrI      xmaI  ecl136II  bssKI  aseI/asnI/vspI  acc65I  cac8I
bslBI      maeI  bsp1286[M.aluI-]  xmnI  tsp509I  bsaWI  pstI
notI      bfaI  bsiHKAI  bsaJI  tsp509I  bsaWI  ageI  sse8387I
fnu4HI/bsoFI      bmyI  hpy99I  aval[M.hpaII-]  hpaII mspI  bspMI      rsaI
acII      speI  banII[M.aluI-]  asp700  accIII hpaII sbfI  csp6I aluI  sf
2301 AAAAAAAAAA AAAGGCGGC CGCGACTAG TGAGCTGTC GACCCGGGA TTAATTCGG ACCGGTACCT GCAGGCGTAC CAGCTTTCCC
TTTTTTTTTT TTTTTTTTTT TTCCCGCCG CGGCTGATC ACTCGAGCAG CTGGCCCTT AATTAGGCG TGGCCATGA CGTCCGCATG GTCGAARGG
pleI
mlyI
hinfI      aluI
2401 TATAGTGAGT CGTATTAGAG CTTCG
ATATCACTCA GCATAATCTC GAACC

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GSeqEdit, DNA92234 [Full], page 15



> length: 2425

```
aatII (GACGTC):
acc65I (GGTACC):
accI (GTMKAC):
accIII (TCCGGA):
acII (CCGC):
acyI (GRCGYC):
afIII (ACRYGT):
ageI (ACCGGT):
ahaII (GRCGYC):
ahaIII (TTTAAA):
aluJ (AGCT):
alw26I (CAGNNNCTG):
alwI (GGATCRRNN):
alwNI (CAGNNNCTG):
apaI (GGGCCC):
apoI (RAATTY):
apyI (CCWGG):
aseI (ATTATAT):
asnI (ATTATAT):
asp700 (GAANNNTTC):
asp718 (GGTACC):
asphI (GWGCWC):
aspX (GACNNNGTC):
avaI (CYCGRG):
avaiI (GGWCC):
bali (TGGCCA):
bamHI (GGATCC):
banI (GGYRCC):

25
1295 2374
727 1117 2348
2366
86 332 355 511 1420 1672 2326 2330
25
37
2371
25
1914
19 48 110 485 569 1006 1680 1781 2016 2343 2392 2419
418 523 565
270 271 628 785 959 1319 1599 1609 1610 1817 1936
418 523 565
533
54 409 841 1249 1381 1879
528 609 813 882 1038 1113 1137 1144 1342 1363 1638 2061
1787 2219-2360
1787 2219 2360
375 1159 1379 1469 2358
1295 2374
484 2152 2342
451
62 280 995 2353
559 705 909 1140 1985 2143 2369
437
270 1609
640 1295 2374
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GSeqEdit, DNA92234 [Full], page 16

banII (GRCGYC) : 484 533 809 2342  
bbsI (GAAGACNNNNNN) : 130 379 587  
bbvI (GCAGC) : 292 312 315 318 321 508 519 522 567 570 672 1235 1552 1756 2017 2024  
bceAI (ACGGCNNNNNNNNNN) : 502 656  
bfaI (CTAG) : 243 1210 1216 1396 1504 1805 1849 1889 2140 2337  
bglI (GCCNNNNNGGC) : 535  
bglII (AGATCT) : 822  
bmyI (GDGCHC) : 159 484 533 809 2152 2342  
bpmI (CTGGAG) : 96 258 325 814 883 1290  
bpuAI (GAAGACNNNNNN) : 130 379 587  
bsaAI (YACGTR) : 42  
bsaHI (GRCGYC) : 25  
bsaI (GGTCTCNNNN) : 1034 2234  
bsaJI (CCNNGG) : 139 359 503 528 545 684 812 881 995 996 1143 1516 2060 2353  
bsaWI (WCCGGW) : 1226 2127 2366 2371  
bseRI (GAGGAGNNNNNNNN) : 342 749 1270  
bsgI (GTGCAG) : 415 670 1994  
bsh1236I (CGCG) : 38 331 1329  
bsfEI (CGRYCG) : 755 2327  
bslHXAI (GWGCWC) : 484 2152 2342  
bslNI (CGTACG) : 40  
bslI (CCNNNNNNNGG) : 135 184 274 275 354 396 614 631 771 1847 1898 2060  
bsmAI (GTCTC) : 1034 2235  
bsmAI (GTCTC) : 1034 2235  
bsmFI (GGGACNNNNNNNNNNNN) : 143 202 297 1141 1399 1986  
bsoFI (GCNGC) : 85 292 312 315 318 321 332 508 519 522 567 570 672 1235 1552 1756  
2017 2024 2326 2329  
bsp120I (GGGCCC) : 533  
bsp1286 (GDGCHC) : 159 484 533 809 2152 2342  
bspCNI (CTCAGNNNNNNNNNN) : 563 1050

GSeqEdit, DNA92234 (Full), page 17

b9pEI (TCCGGA) :	2366
b9pHI (TCATGA) :	1074
b9pMI (ACCTGC) :	2377
b9pMII (TCCGGA) :	2366
b9rFI (RCCGGY) :	2371
b9rI (ACTGGA) :	384 618 1542
b9eKI (CCNGG) :	139 360 528 609 684 813 882 995 996 1038 1113 1137 1144 1239 1342
	1363 1602 1638 2061 2353 2354
b9sSI (CTCGTG) :	2155
b9t4CI (ACNGT) :	643 1354 1573
b9tAPI (GCANNNNTGTC) :	641
b9tDSI (CCRYGG) :	503 1516
b9tFSI (GGATG) :	405 606 857 1068 1203 1605 1844 1857 2175
b9tNI (CCNGG) :	528 609 813 882 1038 1113 1137 1144 1342 1363 1638 2061
b9tUI (CGCG) :	38 331 1329
b9tXI (CCANNNNNNTGG) :	260 1478
b9tYI (RGATCY) :	270 822 1609
btgI (CCRYGG) :	503 1516
btrI (CACGTC) :	667
btsI (GCAGTGNN) :	1992
cac8I (GCNNGC) :	31 35 303 675 868 975 2020 2381
cfoI (GCGC) :	330 364 525 800 1328
cfr10I (RCCGGY) :	2371
cfrI (YGGCCR) :	437 500 611 657 1365 2327
cpoI (CGGWCCG) :	2368
csp6I (GTAC) :	41 387 1296 1897 2375 2387
cspI (CGGWCCG) :	2368
ddel (CTNAG) :	563 1050 1265 1767
dpnI (GATC) :	271 628 786 823 960 1090 1320 1566 1599 1610 1644 1812 1817 1937
	2183

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dpnII (GATC) : 271 628 786 823 960 1090 1320 1566 1599 1610 1644 1812 1817 1937  
2183  
draI (TTTAAA) : 1914  
draII (RGNCCY) : 532 558 768 1984 2142  
draIII (CACNNNGTG) : 642  
dsaI (CCRYGG) : 503 1516  
dsav (CCNGG) : 139 360 528 609 684 813 882 995 996 1038 1113 1137 1144 1239 1342  
1363 1602 1638 2061 2353 2354  
437 500 611 657 1365 2327  
eaeI (YGGCCR) : 2327  
eagI (CGGCCG) : 15 487 862 1100 1177  
earI (CTCTTCNNNN) : 484 2342  
ec1136II (GAGCTC) : 2327  
ec1XI (CGGCCG) : 250 424 474 489 804  
eco57I (CTGAAG) : 396  
ecoNI (CCTNNNNNAGG) : 532 558 768 1984 2142  
ecoO109I (RGNCCY) : 54  
ecoRI (GAATTC) : 528 609 813 882 1038 1113 1137 1144 1342 1363 1638 2061  
ecoRII (CCWGG) : 1929  
ecbRV (GATATC) : 85 292 312 315 318 321 332 508 519 522 567 570 672 1235 1552 1756  
fnu4HI (GCNGC) : 2017 2024 2326 2329  
38 331 1329  
fnuDII (CGCG) : 405 606 857 1068 1203 1605 1844 1857 2175  
fokI (GGATG) : 96 258 325 814 883 1290  
gouI (CTGGAG) : 363 524 799  
haeII (RGGCGY) : 438 501 534 543 612 658 769 1366 1776 2328  
haeIII (GGCC) : 295 420  
hgaI (GACGC) : 484 2152 2342  
hglAI (GAGCNC) : 330 364 525 800 1328  
hhaI (GGCC) : 330 364 525 800 1328  
hinPI (GGCC) : 330 364 525 800 1328

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hincII (GTYRAC) :	2348
hindII (GTYRAC) :	2348
hinfI (GANTC) :	204 451 585 914 1120 1148 1275 1500 1829 2070 2407
hinfI (GRCGYC) :	25
hpaII (CCGG) :	139 361 684 996 1227 1239 1602 2128 2354 2367 2372
hphI (GGTGA) :	3 181 346 1023 1434 1832
hpy188I (TCNGA) :	51 79 252 476 491 582 806 946 1568 1809 1814
hpy188III (TCNNGA) :	97 281 402 443 1051 1074 1209 1289 1446 1873 1933 2156 2366
hpy99I (CGWCG) :	27 2347
hpyCH4III (ACNGT) :	643 1354 1573
hpyCH4IV (ACGT) :	26 43 149 668
hpyCH4V (TGCA) :	34 416 521 671 1030 1283 1524 1995 2023 2051 2104 2380
kpnI (GGTACC) :	1295 2374
ksp632I (CTCTTCNNNN) :	15 487 862 1100 1177
maeI (CTAG) :	243 1210 1216 1396 1504 1805 1849 1889 2140 2337
maeII (ACGT) :	26 43 149 668
maeIII (GTNAC) :	4 180 1435 2158
mboI (GATC) :	271 628 786 823 960 1090 1320 1566 1599 1610 1644 1812 1817 1937
	2183
mboII (GAAGA) :	15 131 380 488 588 825 862 917 1101 1177 1219 1450
mcrI (CGRYCG) :	755 2327
mfeI (CAATTG) :	1622
mluI (ACGGGT) :	37
mlyI (GAGTCNNNNN) :	204 451 585 1120 1500 2407
mnlI (CCTC) :	65 77 126 185 209 227 246 344 350 396 469 545 562 598 724 749 853
	965 886 1021 1168 1180 1270 1287 1293 1324 1402 1738 1835 2005 2146
mroI (TCCGGA) :	2366
msoI (TGGCCA) :	437
mseI (TTAA) :	175 1788 1915 1981 2220 2361
mslI (CAYNNNNRTG) :	400 1405 1407

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nspAI (CMGCKG):  
nspI (CCGG):  
nunI (CAATTG):  
nvaI (CCWGG):  
nvnI (CGCG):  
nwoI (GCNNNNNNNGC):  
nclI (CCSGG):  
ndeII (GATC):  
  
nlaIII (CATG):  
nlaIV (GGNNCC):  
notI (GCGGCCGC):  
nspBII (CMGCKG):  
nspHI (RCATGY):  
nspI (RCATGY):  
paer7I (CTCGAG):  
pali (GGCC):  
pflPI (GACNNNGTC):  
pleI (GAGTCNNNN):  
ppuMI (RGGWCCY):  
pshAI (GACNNNNGTC):  
pspAI (CCCGGG):  
pspGI (CCWGG):  
pspOMI (GGGCCC):  
pstI (CTGCAG):  
pvuII (CAGCTG):  
rcal (TCATGA):  
rmai (CTAG):  
rsaI (GTAC):  
rsrII (CGGCCCCG):  
  
568 1672  
139 361 684 996 1227 1239 1602 2128 2354 2367 2372  
1622  
528 609 813 882 1038 1113 1137 1144 1342 1363 1638 2061  
38 331 1329  
303 312 315 321 357 502 535 641 650 793 802 1555 1665  
139 360 684 995 996 1239 1602 2353 2354  
271 628 786 823 960 1090 1320 1566 1599 1610 1644 1812 1817 1937  
2183  
32 199 336 555 1014 1075 1315 1407 1497  
270 532 533 558 640 705 991 1054 1140 1164 1295 1609 1741 1985 2374  
2326  
568 1672  
31 335  
31 335  
62  
438 501 534 543 612 658 769 1366 1776 2328  
451  
204 451 585 1120 1500 2407  
558 1984 2142  
553  
995 2353  
528 609 813 882 1038 1113 1137 1144 1342 1363 1638 2061  
533  
520 2379  
568  
1074  
243 1210 1216 1396 1504 1805 1849 1889 2140 2337  
41 387 1296 1897 2375 2387  
2368  
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sacI (GAGCTC) : 484 2342
salI (GTCGAC) : 2348
sapI (GCTCTTCNNNN) : 15 486 1099
sau3AI (GATC) : 271 628 786 823 960 1090 1320 1566 1599 1610 1644 1812 1817 1937
2183
sau96I (GNNCC) : 533 534 559 705 769 909 1140 1776 1985 2143 2369
sbfI (CCTGCAGG) : 2378
scrFI (CCNGG) : 139 360 528 609 684 813 882 995 996 1038 1113 1137 1144 1239 1342
1363 1602 1638 2061 2353 2354
sfaNI (GCATC) : 1067
sfcI (CTRYAG) : 10 520 2379 2400
sfII (GGCCNNNNNGGCC) : 534
snaI (CCCGGG) : 995 2353
smlI (CTYRAG) : 62 2006 2147
snaBI (TACGTA) : 42
speI (ACTAGT) : 2336
sphI (GCATGC) : 31
splI (CGTACG) : 40
sse8387I (CCTGCRGG) : 2378
espI (AATATT) : 1528 1949
estI (GAGCTC) : 484 2342
taiI (ACGT) : 26 43 149 668
taqI (TCGA) : 63 443 1259 1322 2349
tfII (GAWTC) : 914 1148 1275 1829 2070
thaI (CGCG) : 38 331 1329
tliI (CTCGAG) : 62
tru9I (TTAA) : 175 1788 1915 1981 2220 2361
tseI (GCWGC) : 292 312 315 318 321 508 519 522 567 570 672 1235 1552 1756 2017 2024
4 180 1435 2158
tsp45I (GTSAC) : 55 410 842 942 1250 1382 1623 1668 1748 1880 2107 2359 2363
tsp509I (AATT) :
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tspRI (NNCAGTGN)	1574 1821 1992 2243
tth111I (GACNNNGTC)	451
vspI (ATTAAAT)	1787 2219 2360
xbaI (TCTAGA)	1209
xhoI (CTCGAG)	62
xhoII (RGATCY)	270 822 1609
xmaI (CCGGGG)	995 2353
xmaIII (CGGCCG)	2327
xmql (GAANNNTTTC)	375 1159 1379 1469 2358

**not found:**

[illegible]

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